



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,084	01/22/2002	Jeffrey P. Fugere	BRD-0002CIP2	4071

7590

12/11/2002

Anthony P. Onello, Jr.
MILLS & ONELLO LLP
Suite 605
Eleven Beacon Street
Boston, MA 02108

EXAMINER

HWU, DAVIS D

ART UNIT

PAPER NUMBER

3752

DATE MAILED: 12/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,084

Applicant(s)

FUGERE, JEFFREY P.

Examiner

Davis Hwu

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-55 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-24, and 25-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baran et al. in view of Cline et al. and Sasaki et al.

The patent to Baran et al. discloses a dispensing controller for a fluid dispensing pump including a feed screw 24 driven by a motor, the dispensing controller for controlling a dispensing operation of a pump, the dispensing controller initiating the dispensing operation in response to a pump control signal. Baran et al. do not disclose the motor having indexed rotational positions and a position controller for controlling the position of the pump as recited. The patent to Cline et al. teaches a dispensing controller comprising a closed-loop servomotor having indexed rotational positions for controlling the dispensing operation and the patent to Sasaki et al. teaches fluid dispensing system comprising a position controller for controlling the position of the pump relative to a substrate, the position controller generating a time-duration-based pump control signal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Baran et al. by replacing the motor of Baran et al. with a motor having indexed rotational positions comprising a time-duration-based signal and the count signal as taught by Cline et al. in order to provide a

desired dispensing amount and to have incorporated a position controller for controlling the position of the pump as taught by Sasaki et al. in order to provide a desired spray capability. The rectangular waveform having a rising edge and a falling edge as recited in claim 9 is an inherent feature of a control signal. The limitations of claims 10 and 11 are also inherent depending on the timer cycling the on and off and the durations. The use of a touch screen interface or a computer interface would have been obvious matters of design choice based on user preference.

3. Claims 43-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baran et al. in view of Cline et al.

The patent to Baran et al. discloses a dispensing controller for a fluid dispensing pump including a feed screw 24 driven by a motor, the dispensing controller for controlling a dispensing operation of a pump, the dispensing controller initiating the dispensing operation in response to a pump control signal. Baran et al. do not disclose the motor having indexed rotational positions and the pump control signal comprising a time-duration-based signal. The patent to Cline et al. teaches a dispensing controller comprising a motor having indexed rotational positions for controlling the dispensing operation and include a time-duration-based signal (Column 3, lines 7-52) and a count signal indicating the number of indexed rotational positions to be traversed by the motor as recited in claim 49. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Baran et al. by replacing the motor of Baran et al. with a motor having indexed rotational positions comprising a time-duration-based signal and the count signal as taught by Cline et al. in

order to provide a desired dispensing amount. The rectangular waveform having a rising edge and a falling edge as recited in claim 45 is an inherent feature of a control signal. The limitations of claims 46 and 47 are also inherent depending on the timer cycling the on and off and the durations. The limitations of claims 50-53 and 55 are recited in column 4 lines 58-67 of Cline et al. The use of a touch screen interface would have been an obvious matter of design choice depending on user preference.

Allowable Subject Matter

4. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

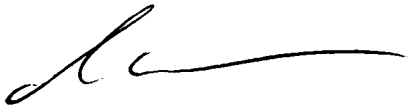
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Monson is pertinent to Applicant's invention.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis Hwu whose telephone number is 703-305-1663. The examiner can normally be reached on M-F 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Y. Mar can be reached on (703)308-2087. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7766 for regular communications and (703)308-7766 for After Final communications.

Art Unit: 3752

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0861.

A handwritten signature in black ink, appearing to read 'Davis Hwu', with a long horizontal flourish extending to the right.

Davis Hwu
December 9, 2002